Enterprise Solutions Key Implementation Considerations





Enterprise Solutions Module 2 Monday, May 8



Learning Objectives



- Learn what the unique elements of ERP Lifecycle Management consist of.
 - □ DoD Enterprise Integration Toolkit Roadmap
 - Phases and Key Considerations
 - Entry and Exit Criteria
 - ☐ Implementation Phase Key Considerations
 - Entry & Exit Criteria
 - Customization vs. Configuration
 - Organizational Structure
 - Importance of Data Quality
 - Testing
- Identify DoD resources for ERP Lifecycle Management





Agenda



	Opening Remarks	Mr. Chip Raymond
	ERP Lifecycle Management	Mr. Steve Krekeler
•	Enterprise Solutions Phases and Key Milestones	Mr. Steve Krekeler
	Break	20 min
	Customization vs. Configuration	Dr. Ray Sommer
	Implementation Phase Key Considerations	Mr. Steve Krekeler
	Enterprise Solutions Toolkits and Resources	Mr. Steve Krekeler
	Q&A	



Key Implementation Considerations





Opening Remarks
Chip Raymond - SEC - Fort Belvoir



Agenda



■ Opening Remarks	Mr. Chip Raymond
■ ERP Lifecycle Management	Mr. Steve Krekeler
■ Enterprise Solutions Phases and Key Milestones	Mr. Steve Krekeler
■ Break	20 min
■ Customization vs. Configuration	Dr. Ray Sommer
■ Implementation Phase Key Considerations	Mr. Steve Krekeler
■ Enterprise Solutions Toolkits and Resources	Mr. Steve Krekeler
■ Q&A	



Key Implementation Considerations





ERP Lifecycle Management Steven Krekeler - Capgemini



ERP Lifecycle Management



- The DoD has an Enterprise Integration (EI) Toolkit Roadmap which defines the ERP Lifecycle Management approach from a DoD perspective
 - Roadmap is a guideline for government and contractor ERP project team members
 - System Integrators will provide proven methodologies for the implementation phase which contain similar stages, activities and deliverables
 - ☐ System Integrator methodologies will not contain DoD 5000 milestones and these milestones will need to be mapped to their phases at project onset

ERP Lifecycle Management begins with the process of defining the business case for an ERP system and includes the acquisition of software, SI services, implementation and post go-live activities.

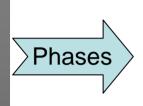
Enterprise Solutions Competency Center



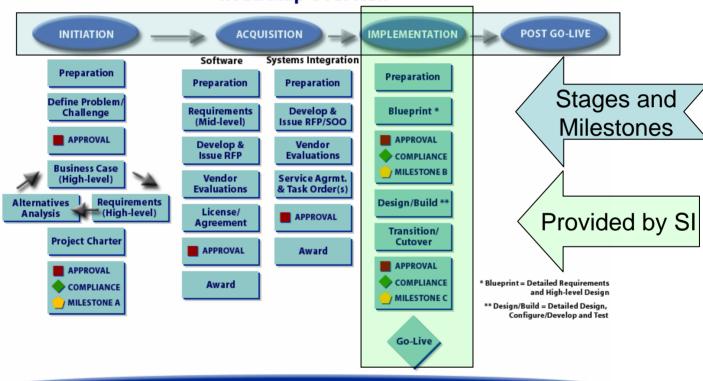


DoD ERP Methodology: EI Toolkit





Enterprise Integration (EI) Toolkit Road Map Overview



CHANGE MANAGEMENT

The El Toolkit offers a sound ERP roadmap with specific DoD milestones. System Integrators will provide a similar ERP Methodology for the project's Implementation Phase.

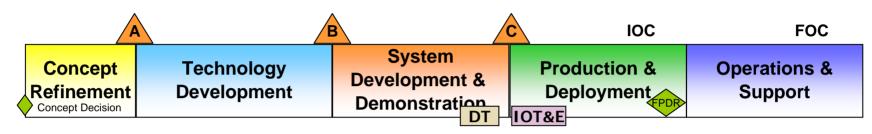
Enterprise Solutions Competency Center



El Toolkit – Acquisition Milestones



Defense Acquisition Management Framework – Traditional

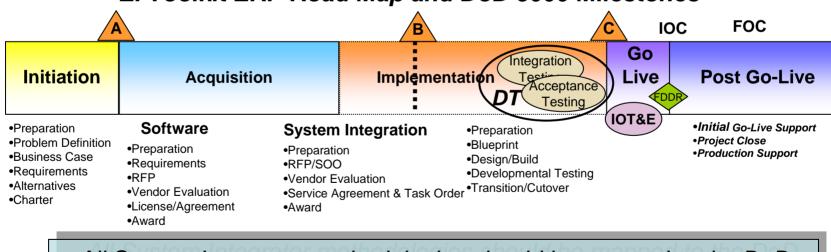


Pre-Systems Acquisition

Systems Acquisition

Sustainment

El Toolkit ERP Road Map and DoD 5000 Milestones



All System Integrator methodologies should be mapped to the DoD 5000 framework at project onset or during the RFP process.



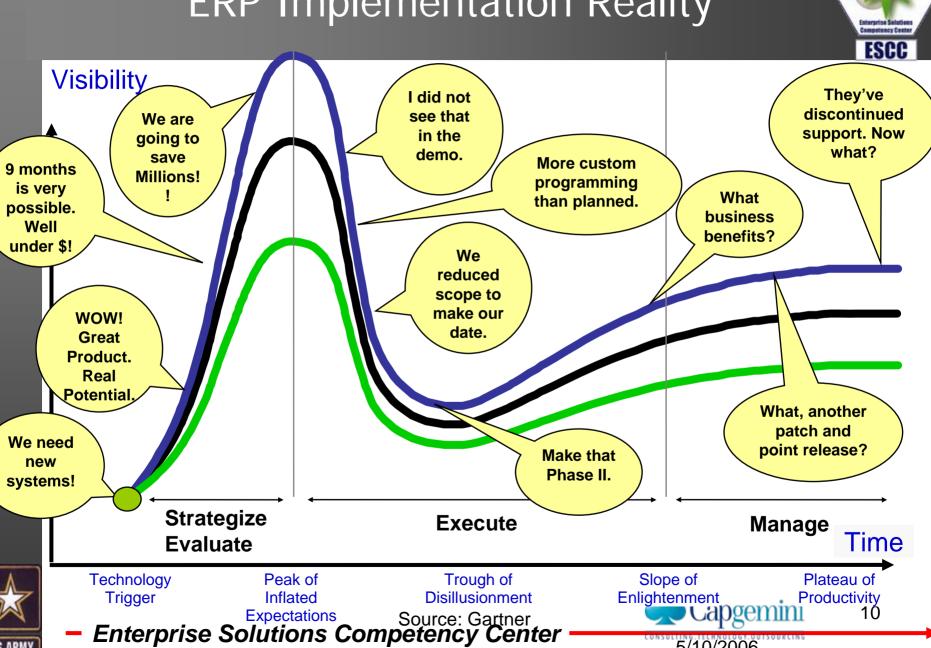


5/10/2006





ERP Implementation Reality



U.S.ARMY

5/10/2006

Implementation Strategies



- Following methodology and phases:
 - ☐ Major System Integrators have used their methodologies successfully and failed at numerous clients; methodology does not determine success
 - □ The devil is in the details make sure all steps have been followed to completion and to a sufficient level of detail before moving to the next phase or milestone
- Control of modifications and scope, use of competent subject matter experts on projects, and clear governance process help mitigate risk
- Addressing Potential High Risk Issues:
 - ☐ Insufficient change management, not managing system integrators, data quality, and insufficient business process realignment leading to software modifications

Following a strict and proven methodology is critical to ERP implementation success but does not guarantee results. Verification of results and accountability is key.

Enterprise Solutions Competency Center



ERP Roles & Responsibilities



- Customer
 Project Sponsor
 □ Functional expertise
 □ Change catalyst
 □ Competency Center
 □ Governance Process
 - ERP Vendor
 □ Deep application knowledge
 □ Best practice business processes
 □ User support
 □ Software support (patches, fixes, upgrades)

- Systems Integrator
 - ☐ Project Management skills
 - Experience
 - Certifications
 - Methodology
 - ☐ Change Management and Training development
 - ☐ Interface with legacy systems
 - ☐ Best practice implementation experience
 - Core ERP
 - Bolt-ons
 - Gap resolution
 - ☐ Focus on specific industries or business areas

All the players contribute lessons learned in their area of expertise.







Agenda



Opening Remarks	Mr. Chip Raymond
-----------------	------------------

■ ERP Lifecycle Management Mr. Steve Krekeler

■ Enterprise Solutions Phases Mr. Steve Krekeler and Key Milestones

■ Break 20 min

■ Customization vs. Configuration Dr. Ray Sommer

Implementation Phase Key Considerations Mr. Steve Krekeler

■ Enterprise Solutions Toolkits and Resources Mr. Steve Krekeler

■ Q&A



Key Implementation Considerations



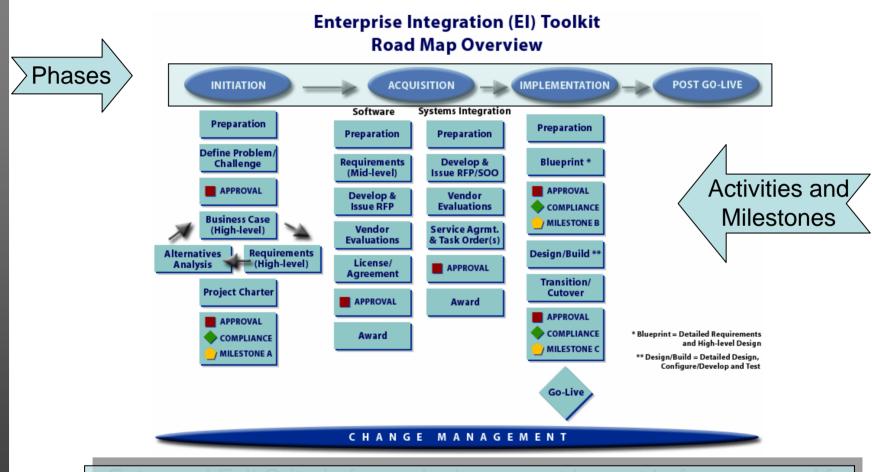


Enterprise Solutions Phases and Milestones
Steven Krekeler - Capgemini



DoD ERP Methodology: EI Toolkit





Entry and Exit Criteria for each phase must be met before approval for the next phase is given by project leadership.

Enterprise Solutions Competency Center

U.S.ARMY



Initiation Phase: Entry & Exit Criteria



Entry Criteria

- 1. Define Problem/Challenge
- 2. Define high-level business case
- 3. Define high-level requirements
- 4. Perform Alternatives Analysis
- 5. Document Project Charter

Exit Criteria

U.S.ARMY

- Written approval to proceed
- High level cost estimates for each alternative
- 3. Initial Project Charter
- 4. Acquisition Strategy
- 5. Complete Milestone A Criteria
 - a. Obtain Domain Advocacy and Comptroller compliance
 - b. Prepare appropriate documentation to validate compliance with requirements of Clinger Cohen Act (CCA)
 - c. Obtain CIO Acknowledgement of CCA compliance
 - Register the system being acquired with the appropriate entity
 - e. Begin Defense Information Technology Security Certification Accreditation (DITSCAP) phase 1.







Initiation Phase: Key Considerations



- Key Considerations
 - Starts with the definition of the problem not the technology solution
 - What strategic Army objective is being supported?
 - □ What capability will the solution deliver?
 - What enterprise-level business processes are involved?
 - ☐ What context will the solution operate in?



COMPLIANCE MILESTONE A

Enterprise Solutions solve business problems – the technology is only an enabler





Acquisition Phase: Entry & Exit Criteria



SOFTWARE

- □ Entry Criteria
 - Document Mid-Level Business Requirements
 - 2. Issue RFI or Draft RFP
 - 3. Develop and Issue RFP
- □ Exit Criteria
 - Evaluate Software Vendors
 - 2. Obtain Approval to Award
 - 3. Award
 - 4. Finalize License and Maintenance Agreement





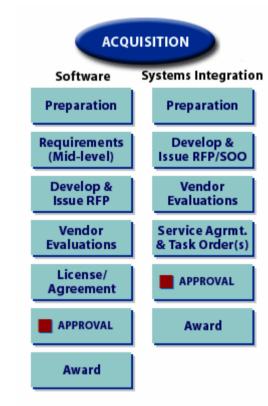


Acquisition Phase: Entry & Exit Criteria



SYSTEMS INTEGRATION

- □ Entry Criteria
 - 1. Complete Software Acquisition
 - 2. Develop and Issue RFP/SOO
 - 3. Issue RFI or draft RFP
 - 4. Develop and Issue RFP
- ☐ Exit Criteria
 - 1. Evaluate System Integrators
 - 2. Obtain Approval to Award
 - 3. Award
 - Finalize Master Agreement and Initial Task Orders



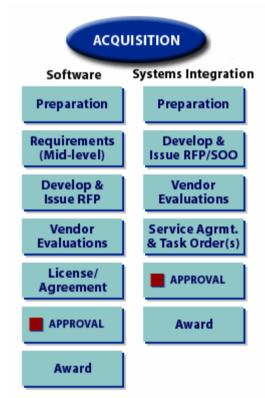




Acquisition Phase: Key Considerations



- Key Considerations
 - ☐ Use of Enterprise Software Initiative (ESI) Blanket Purchase Agreements (BPA) for Oracle & SAP Software is mandatory
 - □ ESI BPAs also exist for System Integration
 Services
 - Use the RFP process to obtain essential services like Change Management via the procurement process
 - Ownership of intellectual property should be retained by Army



According to ESI, the cost of System Integration services can be up to 15 times higher than software costs and must be rigorously managed.







Implementation Phase: Entry & Exit Criteria



Entry Criteria

- 1. Formation of Governance/Change Control Board
- 2. Selection of Project Manager and Government Team Members
- 3. Acquisition of Software
- 4. Acquisition of System Integrator
- 5. Procurement of Hardware

Exit Criteria

- 1. Validation of successful data conversion
- 2. Approval of test results
- 3. Trained End-Users
- 4. Cut-over to Production System
- 5. Defined Sustainment Processes



 Blueprint = Detailed Requirements and High-level Design

Design/Build = Detailed Design, Configure/Develop and Test

21







Implementation Phase: Key Considerations



- Key Considerations
 - Most important phase, has the most risk to cost and schedule
 - ☐ System Integrators must be proactively managed
 - Must have clear definition of scope and requirements to be met
 - Need detailed but rapid review of change requests by Army leadership
 - Change requests must be accompanied by a business case
 - □ Army Business Process Subject Matter Experts should be assigned to ERP implementations
 - Resources should be seasoned and well-respected to facilitate organizational buy-in
 - Budget for personnel to backfill for SMEs while on ERP project, allow 10% contingency for project schedule overruns
 - The ratio of technical resources to business process resources, i.e. Government personnel, should be approximately 1 to 5* but in the public sector it's usually much lower or the opposite

 *Source: DuPont

Enterprise Solutions Competency Center



 Blueprint = Detailed Requirements and High-level Design

Design/Build = Detailed Design, Configure/Develop and Test

22

5/10/2006



Post Go-Live: Entry & Exit Criteria



POST GO-LIVE

Entry Criteria

- Cutover to Production system
- 2. Help Desk/Sustainment Organization Start-up
- 3. Ensure the new roles and responsibilities are captured in job descriptions
- 4. Document and reward improvements in performance evaluations

Exit Criteria

- 1. Transition key performance indicators to Sustainment Organization
- 2. Service Level Agreements for expected performance
- Document lessons learned and submit to Enterprise Solutions Competency Center
- 4. Communicate with impacted stakeholders
- 5. Capture and institutionalize training





Post Go-Live: Key Considerations



Key □	Considerations Help Desk must be fully staffed Day 1	POST GO-LIVE
	Government and Contractor project team members should be a to support the sustainment team during a stabilization period	available
	Decommissioning of Legacy Systems should occur based upor previously determined milestones	n meeting
	Track and address subsequent organizational impacts with sur action plans	veys and
	Coordinate with Continuous Process Improvement Authority-	orocess
	Maintenance and upgrade planning will need to commence im-	mediately
	Assign responsibility for maintaining and institutionalizing trainiuser documentation	ng and





Key Implementation Considerations





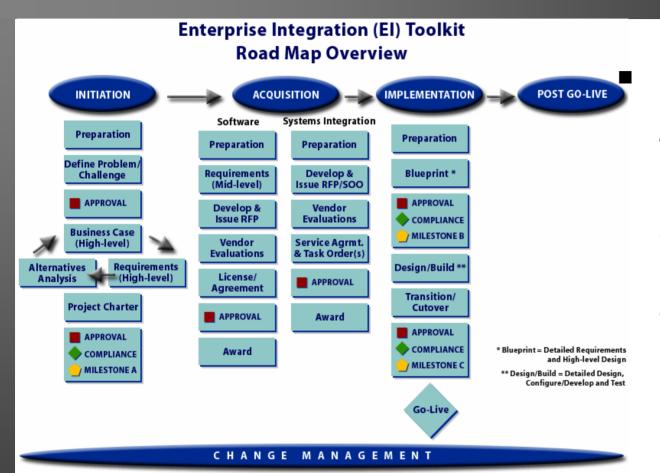
Change Management



25

Change Management





Change management costs will vary by ERP program requirements, but on average 10% to 15% of total program budget should be allocated to change management activities.

Source: AMR Reference accessed March 20th, Copyright AMR Research, 2005

The primary cause of failure is most frequently the failure to <u>anticipate</u> and effectively manage cultural and organizational change. -- Gartner.

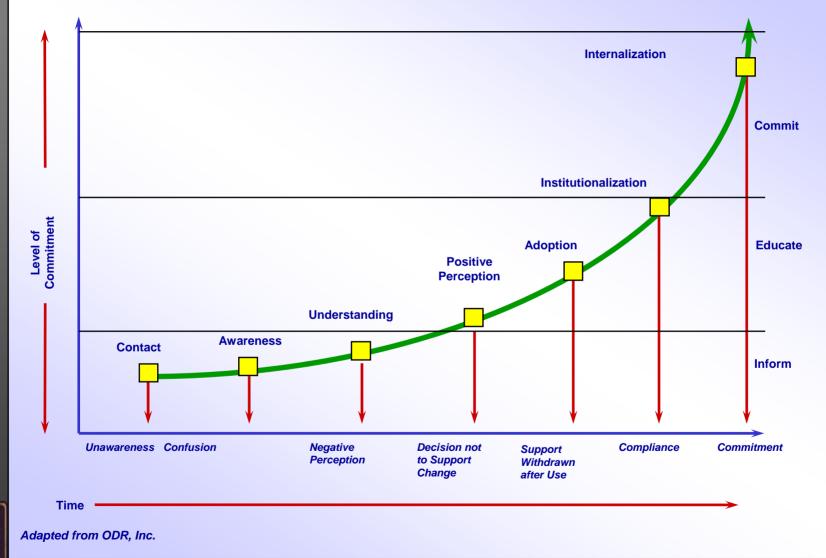
Enterprise Solutions Competency Center

U.S.ARMY



Change Management Continuum







Enterprise Solutions Competency Center

5/10/2006

Change Management Roadmap



	BY PHASE			
BY ROLE	INITIATION	ACQUISITION	IMPLEMENTATION	POST GO-LIVE
LEADERSHIP	Identify and Engage	Develop Strategy	Implement Strategy	Measure Effectiveness
COMMUNICATIONS	Determine Strategy	Develop Plan	Execute Plan	Determine Satisfaction
ORGANIZATION STRUCTURE	Determine Requirements	Develop Plan	Establish Infrastructure	Review and Planning
READINESS	Plan and Assess	Include in Contracts	Measure and Assess	Monitor and Measure
EDUCATION AND TRAINING	Raise Awareness	Review Current Skills	Define and Train	Continue Training

Change Management is the best means of fostering adoption of new technology but is often overlooked and poorly funded.





Change Management: Key Considerations



- Key Consideration
 - ☐ Must be defined in the Acquisition process
 - Define and budget for change management requirements during RFP process
 - Grade proposed plans submitted by System Integrators during selection process
 - Designate government personnel as team members with defined Change Management responsibilities
 - Plan to use current organizational communication mechanisms to communicate changes early and often
 - Plan to invest in End User Training development, delivery, and containment
 - ☐ Leadership at all levels take accountability for success
 - Leaders drive overarching themes of Vision and sense of urgency.
 - ☐ Focus on your stakeholders, at all levels
 - Understand who they are, their hopes and reservations
 - Target communications messages, training, leadership emphasis according to stakeholder impact.
 - □ End User Training is a change management tool
- Enterprise Solutions Competency Center





Key Implementation Considerations





Implementation Phase Key Considerations





and High-level Design

Design/Build = Detailed Design, Configure/Develop and Test

Enterprise Solutions Competency Center

Preparation: Entry & Exit Criteria



Entry Criteria

- Draft Project Charter
- 2. Contracts finalized
- 3. Government team members trained on vendor software and in place
- 4. Software and Hardware installed



Preparation

Exit Criteria

- Conduct Project Kick-Off Meetings
- 2. Project Plan (WBS, schedule) complete
- 3. Project Management Plans (Scope, Risk Mitigation, Change Management, Information Assurance) complete
- Project Charter Updated
- Thorough understanding of System Integrator Implementation Methodology
- 6. Approval and Sign-off of Preparation Phase by Army





Preparation: Key Considerations



IMPLEMENTATION

- Key Considerations
 - □ All phases and deliverables to be provided by the System Integrator must be understood by all government team members and leadership



- □ The process for Change Requests must include the submission of a detailed business case with a proof of concept based upon no modification of ERP software, even if a modification is ultimately approved
- ☐ Identification of risks and risk mitigation plans should begin on Day 1





BluePrint: Entry & Exit Criteria



Entry Criteria

- Project Kick-off
- 2. Detailed Project Plan
- 3. Project Management Plans
- 4. Mid-level requirements documented in Acquisition Phase
- Software Instances Created

Exit Criteria

- Scope defined
- 2. Data Migration Strategy defined and data identified
- 3. Reports, Interfaces, Conversion, and Enhancements (RICE) objects identified
- 4. Business Case for modifications documented
- 5. Change Requests approved
- 6. New Business Processes defined and approved
- 7. Approval and Sign-off of BluePrint Phase by Army
- 8. Domain Advocacy and Comptroller Compliance obtained
- Milestone B satisfied



 Blueprint = Detailed Requirements and High-level Design





BluePrint: Key Considerations



- Adopting commercial best-practice process built into the software should be a priority
 - Any deviation from this practice must be justified in a business case and submitted for approval



Typical Issues during BluePrint Phase:

- □ Decisions to modify ERP software without modeling alternative business processes
- Change requests multiply as users attempt to maintain the status quo
- Scope expands and project timelines fall behind
- Software changes might be required but should be the exception not the rule
- ☐ New ERP concepts are not well understood:
 - Customization vs. Configuration
 - Organizational Structure Design
 - Data Quality Requirements







 Blueprint = Detailed Requirements and High-level Design

Agenda



•	Opening Remarks	Mr. Chip Raymond
•	ERP Lifecycle Management	Mr. Steve Krekeler
•	Enterprise Solutions Phases and Key Milestones	Mr. Steve Krekeler
	Break	20 min
	Customization vs. Configuration	Dr. Ray Sommer
•	Implementation Phase Key Considerations	Mr. Steve Krekeler
•	Enterprise Solutions Toolkits and Resources	Mr. Steve Krekeler



Agenda



•	Opening Remarks	Mr. Chip Raymond
•	ERP Lifecycle Management	Mr. Steve Krekeler
•	Enterprise Solutions Phases and Key Milestones	Mr. Steve Krekeler
•	Break	20 min
	Customization vs. Configuration	Dr. Ray Sommer
	Implementation Phase Key Considerations	Mr. Steve Krekeler
•	Enterprise Solutions Toolkits and Resources	Mr. Steve Krekeler
•	Q&A	



Key Implementation Considerations





Customization vs. Configuration

Dr. Ray Sommer

Enterprise Integration, Incorporated



37

Clarification of Terms



■ Conversion = Extracting, Cleansing, and Loading legacy data from the previous system into the COTS ERP.



Configuration = Taking the COTS ERP out of the box and making it work for you using only the "normal" settings and controls in the software.

Blueprint = Detailed Requirements and High-level Design

- **Customization** = Changing the COTS ERP software by some kind of modification, enhancement, or development effort beyond the scope of what the "normal" settings and controls in the software facilitate.
- **Development** = Writing new or modifying existing software code.
- Modification (or "Mod") = Building new or enhancing existing functionality by modifying the COTS ERP software code.





BluePrint – Customization vs. Configuration





Configuration is making the COTS ERP work for you by setting the delivered parameters within the system.



and High-level Design



 Customization or modification implies doing development work that will inevitably cost more money and take more time.

Configuration and Customization should both be controlled at the Enterprise Level to move toward enterprise integration.





A Comparison by Examples

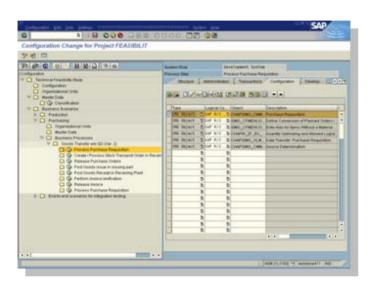


With	Only Configuration Uses the standard COTS ERP reports as they are	l Wit	h Customization Builds new, custom reports	IMPLEMENTATION Preparation
	Uses the standard COTS ERP transactions as they are to run your business processes		Creates new, custom transactions or screen sequences	Blueprint * * Blueprint = Detailed Requirement and High-level Detailed
	Uses the fields and tables as they are delivered in the COTS ERP to hold your organization's data		Creates new tables or fields to hold special legacy data	
	Uses standard "modular" functionality of the ERP to address your business processes		Interfaces with a 3 rd party application to perform a function or process	,



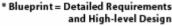
Performing Configuration





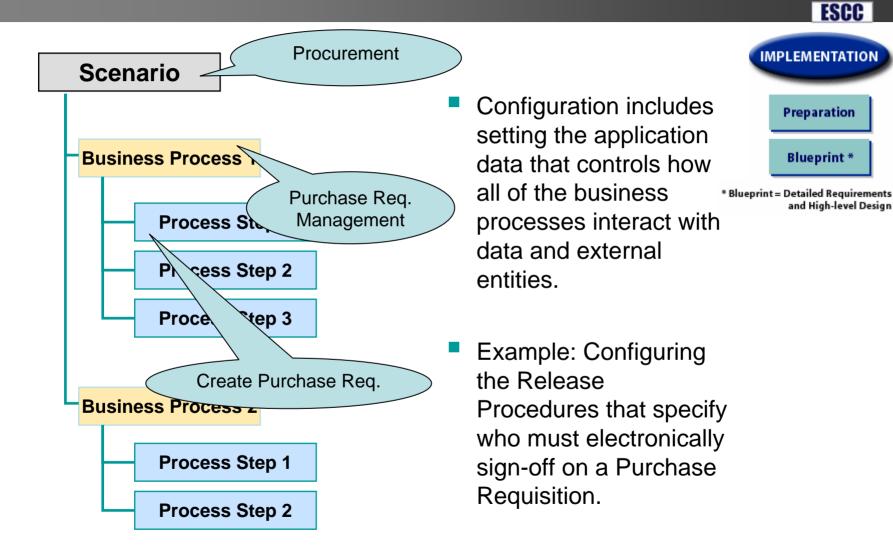
- Each COTS ERP product has a standard interface that is used specifically for setting basic configuration parameters.
- For example, in SAP one uses the "Solution Manager" component to manage all SAP configuration. In PeopleSoft, "Foundation Tables" are used for Configuration.







Configuration enables Business Processes





How much Customization?



Enhancements or Modifications

Avoid custom development or modification – it can make the system cost prohibitive to upgrade.

Creating
New Reports

COTS ERPs have extensive reporting capability built in – gather requirements carefully before developing many custom reports.



Blueprint *

 Blueprint = Detailed Requirements and High-level Design

Interfacing to Other Systems

Interfacing should be minimized whenever possible

Conversion of Legacy Data

Data must be loaded – it might be necessary to build load programs.

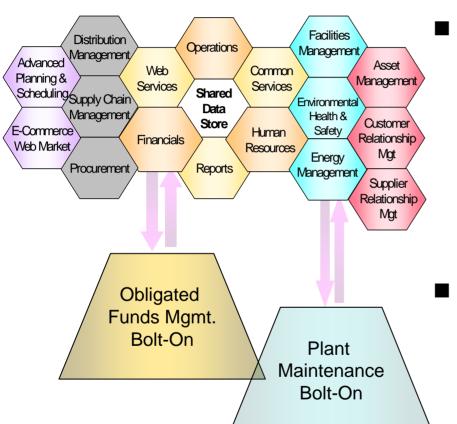




Modules vs. Bolt-Ons



and High-level Design



COTS ERP functionality is usually purchased in "Modules" - these correspond to "capabilities to perform specific business Blueprint = Detailed Requirements processes / activities within in the ERP system."

Bolt-Ons are "Third-Party" applications that are designed to be interfaced or "boltedon" to the ERP system to perform a specific business task/function.

IMPLEMENTATION Preparation Blueprint *

Only use Bolt-Ons when a compelling business case exists that the Modular functionality provided by an ERP is insufficient for Army requirements.





Key Implementation Considerations





ERP & Organizational Structure



Organizational Structure is Fundamental



Organizational Structure



and High-level Design

Blueprint = Detailed Requirements The Organizational Structure within a COTS ERP is fundamental to the functioning of the software system. It defines the landscape for all other business entities within the system from where accounting charts will reside to what possibilities will be available to move materials.



The Organizational Structure should be carefully and coherently defined during the Blueprint (Design) phase.



Impacts of the Organizational Structure Decision

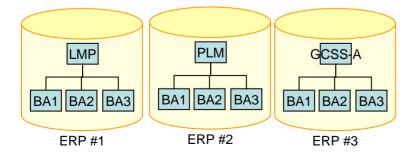


Making the correct Organizational Structure decisions early and adhering to them will ensure that the kind of sub-optimal decision (described below) will not occur.

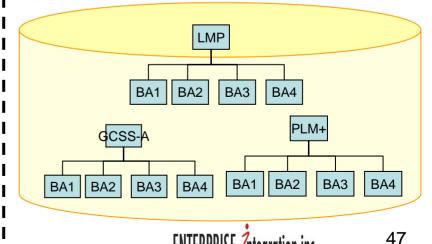


Blueprint = Detailed Requirements and High-level Design

Multiple systems, one organization in each



One system,
multiple organizations with
unique codes

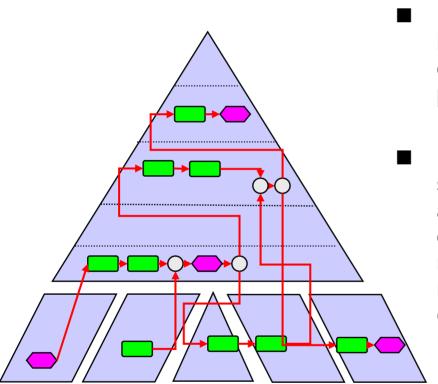






Processes within the Organizational Structure





Business processes happen within the context of the organization's physical/logical structure.

IMPLEMENTATION Preparation Blueprint *

Business processes that span multiple functional areas within an organization or across multiple organizations or multiple systems of an enterprise are End-to-End (E2E) processes.

 Blueprint = Detailed Requirements and High-level Design

In order to achieve true enterprise-wide processes, the enterprise organizational structure must be established and adhered to.





Key Implementation Considerations



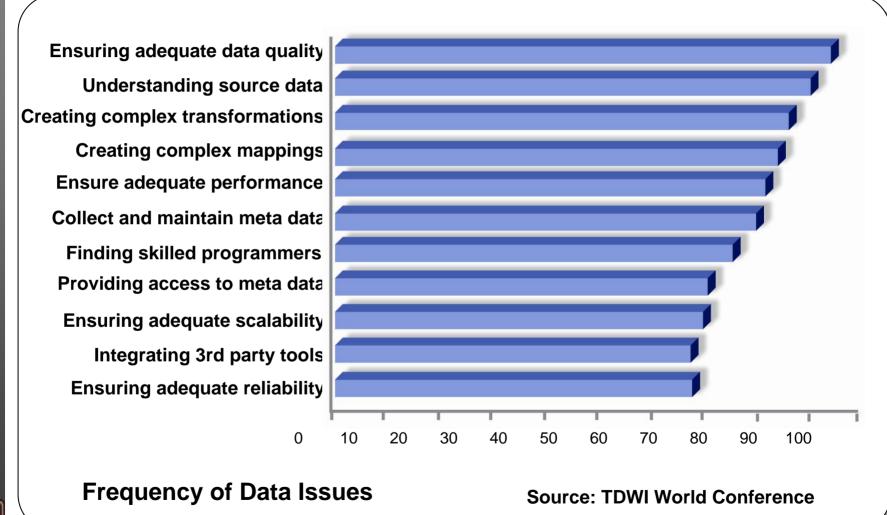


ERP & Data Quality



Data Quality is Critical





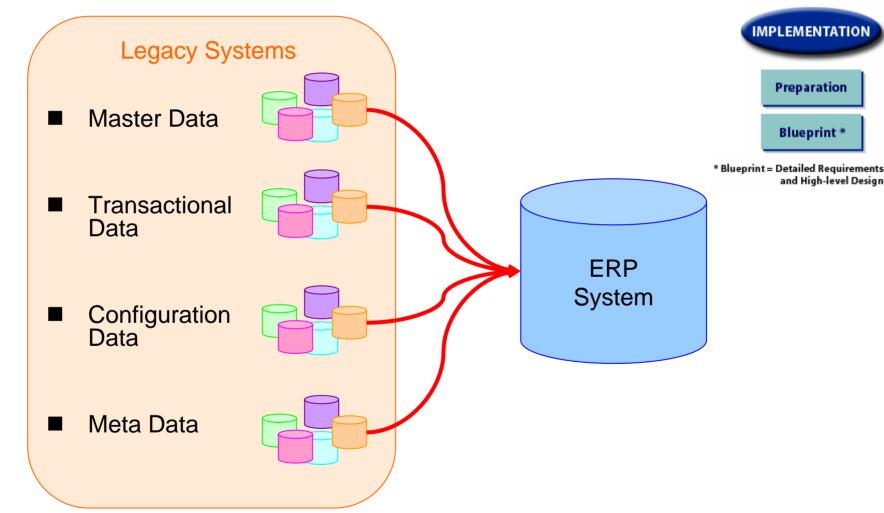


Enterprise Solutions Competency Center

ENTERPRISE Integration inc.

Data Defines ERP System





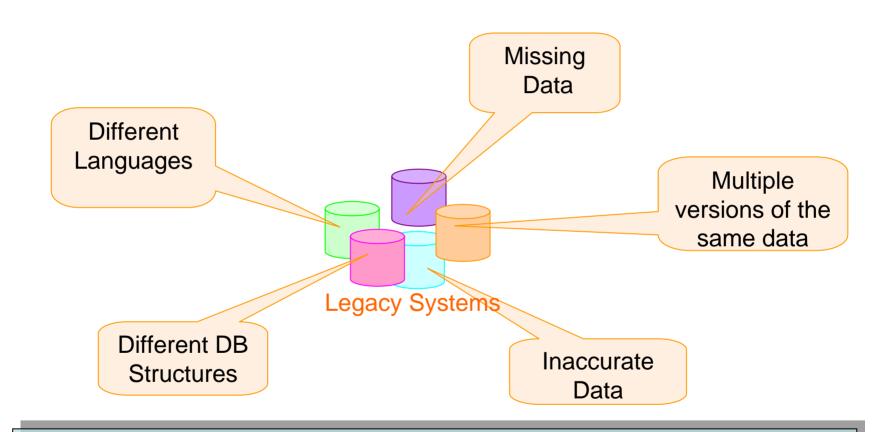


Enterprise Solutions Competency Center

ENTERPRISE Integration inc.

Causes of Poor Data Quality





Ignoring data issues won't make them go away; addressing them methodically is the only way to ensure your new system is not burdened as well. 52





Data Challenges







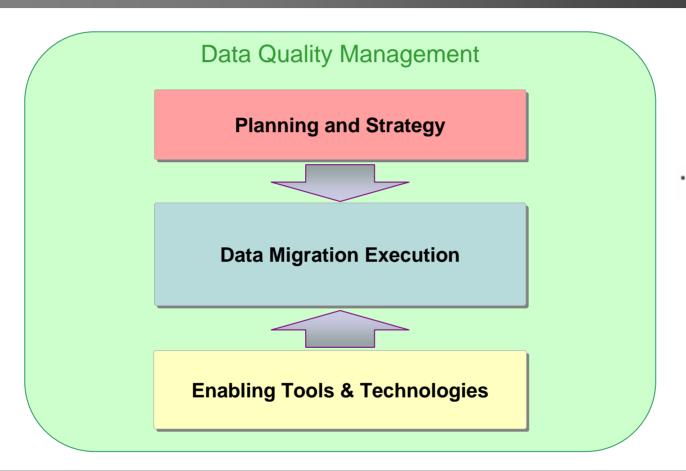
Enterprise Solutions Competency Center

ENTERPRISE Integration inc.

5/10/2006

Data Quality Management







Blueprint = Detailed Requirements and High-level Design

In order to do Data Quality Management right, it is crucial that Planning, Execution, and Enabling Technology activities occur.

Enterprise Solutions Competency Center

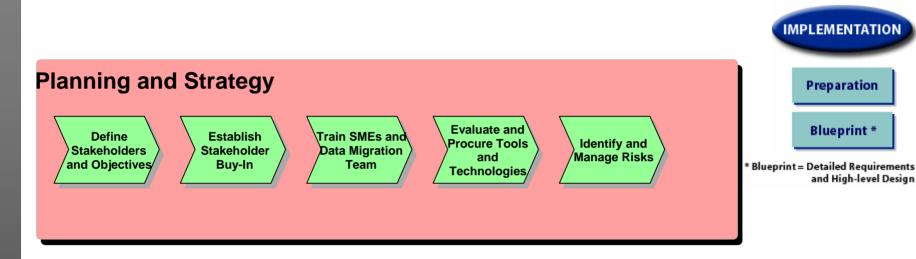


54

J,

Data Quality Management – Planning & Strategy





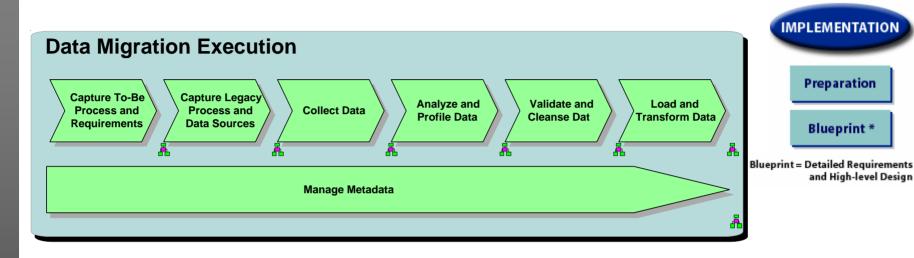
- Define the strategy to manage Data Quality as early as possible in the implementation.
- Create a plan (distinct from the implementation) to address Data Quality.

Identifying all the CORRECT sources of data is a significant challenge for the Army because all system interactions must be analyzed.



Data Quality Management - Execution





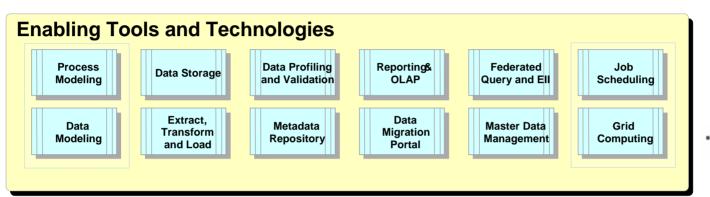
- During implementation, plan to address the Data Quality issues systematically and early.
- Major Data Migration Activities focus on capturing data migration requirements, addressing data quality issues, and loading data into the target system.

Data Migration should have a separate workstream, budget and team which coordinates with the Enterprise Solution project team.



Data Quality Management -**Tools & Technology**







- Effective Data Quality Management requires supporting tools & technologies.
- These tools must be sourced & procured prior to the start of the Enterprise Solution project.

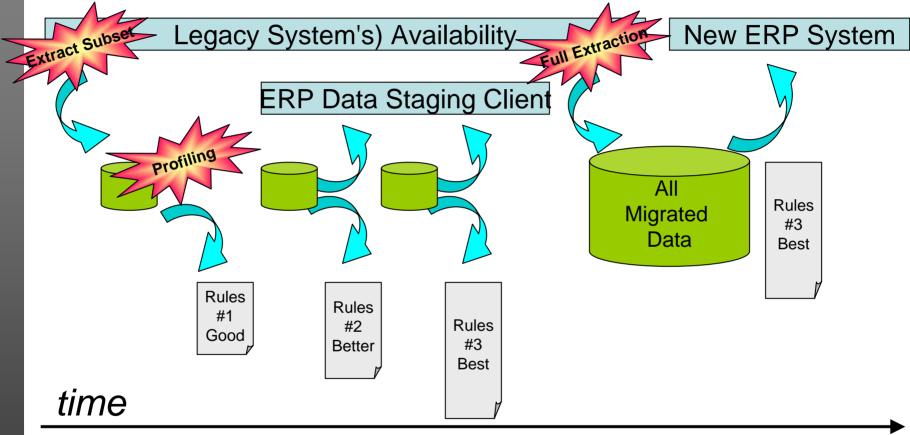
The procurement and training of Data Quality tools and team members should happen in conjunction with the start of the Enterprise Solution project.





Data Migration Strategy





Start planning & strategy early because Data Quality Management is an evolutionary process that cannot be adequately accomplished without adequate preparation.

Enterprise Solutions Competency Center

U.S.ARMY



Agenda



Opening Remarks	Mr. Chip Raymond
-----------------	------------------

■ ERP Lifecycle Management Mr. Steve Krekeler

Enterprise Solutions Phases
Mr. Steve Krekeler
and Key Milestones

■ Break 20 min

Customization vs. Configuration
Dr. Ray Sommer

■ Implementation Phase Key Considerations Mr. Steve Krekeler

■ Enterprise Solutions Toolkits and Resources Mr. Steve Krekeler

■ Q&A



Key Implementation Considerations





Design/Build Phase
Mr. Steve Krekeler - Capgemini



Design & Build: Entry & Exit Criteria



Entry Criteria

- BluePrint approved
- Change Requests including Business Case approved
- Technical architecture and infrastructure defined
- Development, Configuration and Test Environments ready
- High-level design for enhancements complete
- 6. Training Plan complete

Exit Criteria

- System Configured & Documentation complete
- RICE Objects unit tested and results documented
- 3. Security tested and results documented

Enterprise Solutions Competency Center

- Training and Production Environments ready
- Legacy Data Cleansed and Data Migration Tested
- DT&E requirements satisfied
- Cutover Plan documented
- Approval and Sign-off of Design/Build Phase by Army















** Design/Build = Detailed Design, Configure/Develop and Test

Design & Build: Key Considerations



- Key Considerations
 - Effective Testing is critical; defect review and management should be regularly reported
 - OT&E and DT&E testing was designed to address custom development and weapons systems, other Services have a modified approach for COTS products
 - ☐ Technical environments must also be tested for stability; system downtime can significantly impact the schedule
 - Migration of software code from one environment to another involves a detailed Configuration Management process which should be understood by the entire team









Design/Build = Detailed Design, Configure/Develop and Test





Industry Testing Standards



Functional Testing

- ☐ Unit Testing
 - Executed at the level of Business Transactions and focused on individual software objects
- □ Integration/System Testing
 - Executed at the Business Scenario level and focused on end-to-end business processes (e.g. Hire to Payroll, Asset Life Cycle, etc.)
- ☐ Regression Testing
 - Executed on already implemented system functionality
 - Ensure proposed changes (new functionality, additional modules, new sites, upgrades, etc.) do not have an adverse impact on functionality in production
- ☐ User Acceptance Testing
 - Involves project team working with end-users to verify that the system satisfies the approved business requirements

Technical Testing

- □ Volume/Stress Testing
 - performed in the actual production environment or in an environment that mirrors the actual production environment.
 - Attempts to find the capability thresholds of the system and overall system effectiveness.
- Enterprise Solutions Competency Center













** Design/Build = Detailed Design, Configure/Develop and Test



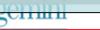
Industry Testing Deliverables



Testing	 Testing Strategy Testing Project Plan & Test Execution Schedule Testing Control Processes Test Plans Test Results Reports 	Preparation Blueprint * APPROVAL COMPLIANCE
Business Process Teams	 Integration Test Cases Integration Test Scripts & Test Results Tested (positively & negatively) Security Roles & Profiles 	Design/Build ** Design/Build = Detailed Design Configure/Develop and Tes
Technical	 Test Environments for all testing stages Unit Test Cases & Test Scripts 	
Data	 Converted Data to support testing stages 	



Software testing tools for ERP implementations are widely used by industry to streamline and structure testing activities.



Key Implementation Considerations





Transition/Cutover Phase



65

Transition/Cutover: Entry & Exit Criteria



Entry Criteria

- User Acceptance test sign-off
- 2. Cutover Plans tested
- 3. Data Migration tested
- 4. Security Profiles tested
- 5. End-users trained
- 6. End-user Documentation complete
- 7. Cutover Communication Plan executed

Exit Criteria

- 1. Production System running
- 2. Help Desk established
- 3. Lessons Learned documented
- 4. End-user sample surveyed
- 5. Approval and Sign-off of Transition/Cutover Phase by Army
- 6. Domain Advocacy obtained
- 7. OT&E requirements satisfied
- 8. Milestone C satisfied







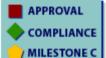


















Transition/Cutover: Key Considerations



Key Considerations

- □ Data cleansing and validation will require a significant number of time and resources; it is an extremely high risk area
- ☐ There should be NO SURPRISES;
 - All impacted stakeholders should be able to clearly articulate the GO LIVE date
 - All end-users should be trained on the system
 - If communication and training is not effective, the Help Desk will be bombarded with unnecessary inquiries
 - Leaders should set clear expectations for success
- ☐ The ability to log-in to a computer remotely to resolve easy technical issues is beneficial



Preparation

Blueprint *

- APPROVAL
- COMPLIANCE
 MILESTONE B
- Design/Build **

Transition/ Cutover

- **APPROVAL**
- COMPLIANCE
 MILESTONE C







Key Implementation Considerations





ERP & DoD Developmental Test & Evaluation (DT&E) and Operational Test & Evaluation (OT&E)



68

DT&E and OT&E



proc	elopment Test and Evaluation (DT&E) fully demonstrates luct performance and stability resulting in a system qualified for cessful OT&E	Preparation
	Uses Engineering tests to minimize design risks	Preparation
	Provides software, security, system safety and interoperability certifications	Blueprint *
	Determines achievement of functional requirements and critical technical parameters	APPROVAL COMPLIANCE
	Determines if the system is technically ready for OT&E and/or ready to enter the next acquisition phase	MILESTONE
	Occurs after Design/Build Phase	Design/Build *
	rational Test and Evaluation (OT&E) is a field test of a	Transition/ Cutover
	em or item to examine its operational effectiveness, suitability,	
	survivability.	APPROVAL
		COMPLIANCE
and	survivability. Conducted under realistic operational conditions with users who represent those expected to operate and maintain the system when it	APPROVAL COMPLIANCE MILESTONE



Source: Army Pamphlet 73-1



69

DT&E and OT&E Differences



DT&E	OT&E
Controlled by Program Manager	Controlled by Independent Agency
One-on-One Tests	Many - on – Many Tests
Controlled Environment	Realistic/Tactical Environment with Operational Scenario
Contractor Involvement	Restricted System Contractor Involvement
Trained Experienced Operators	Troops Recently Trained on System
Precise Performance Objectives and Threshold Measurement	Performance Measurement of Operational Effectiveness and Suitability
Test to Specification	Test to Requirements
Development Test Article	Product on Representative Test Article

EMENTATION reparation









Transition/ Cutover







70



U.S.ARMY



Example: Air Force QT&E



- Qualification Test and Evaluation (QT&E)
 - □ QT&E is a modified form of DT&E conducted on commercial off-the-shelf (COTS), nondevelopmental items (NDI), and government equipment (GFE).
 - ☐ Candidate systems for QT&E require little or no government funded research and development (R&D), engineering, design, or integrated efforts.
 - ☐ In addition, QT&E:
 - Is planned, conducted, and reported following the same test processes in this AFI applicable to all DT&E
 - Identifies, tracks, and resolves system deficiencies as early as possible. Also identifies enhancements.
 - Is funded with Operations and Maintenance (O&M) (3400) funds, or Procurement funds
 - Supports the decision to certify the system ready for dedicated Qualification Operational Test and Evaluation (QOT&E)





Example: Air Force QOT&E



- Qualification Operational Test and Evaluation (QOT&E)
 - QOT&E is the name used for OT&E when no significant research and development is required.
 - It used when evaluating military unique portions and military applications of commercial off-the-shelf (COTs), nondevelopmental items (NDI), and government furnished equipment 9GFE).
 - ☐ In addition, QOT&E:
 - QOT&E planning and conduct are held to the same standards and policies as IOT&E.
 - Candidate systems of QOT&E require little or no government funded R&D, engineering, design, or integration efforts
 - May use commercially available T&E information for evaluating any non-militaryunique areas
 - Is usually completed before the first production article is fielded or deployed for military use
 - Is funded with Operations and Maintenance or Procurement funds
 - Is conducted by AFOTEC using the same policies as IOT&E





Agenda



Opening Remarks	Mr. Chip Raymond
Opening Remarks	wr. Chip Raymon

ERP Lifecycle Management	Mr. Steve Krekeler

- Enterprise Solutions Phases
 Mr. Steve Krekeler
 and Key Milestones
- Break 20 min
- Customization vs. Configuration Dr. Ray Sommer
- Implementation Phase Key Considerations Mr. Steve Krekeler
- Enterprise Solutions Toolkits and Resources Mr. Steve Krekeler
- Q&A





Key Implementation Considerations





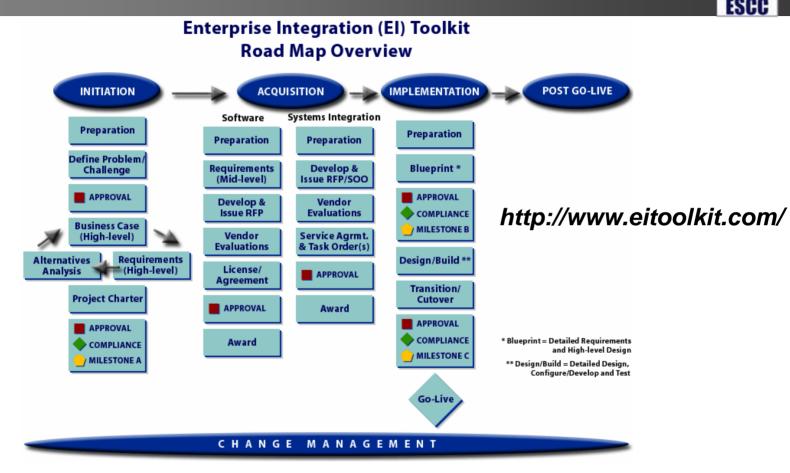
DoD Enterprise Solutions Resources
Mr. Steve Krekeler - Capgemini



74

ERP Lifecycle – DoD EI Toolkit





- •Reconciliation of typical ERP Methodologies and DoD milestones
- •Used in conjunction with System Integrator's Methodology
- Developed by OSD

U.S.ARMY

- •Validated by Gartner as consistent with industry best practice in
- Enterprise Solutions Competency Center



ESCC



ERP/SOA Laboratory allows the Army community to:

- Access best-of-breed software
- Test new software functionality
- Proof concept models, technical solutions and integration.
- **2. ERP/SOA Education** provided through the ESCC website assists with:
 - Development and sharing of white papers
 - Development and delivery of relevant traditional instruction and virtual / distance training,
 - Maintenance of a repository of lessons learned.
- **3. ERP/SOA Consultancy** services provide:
 - Coaching, assessment, recommendations, and compliance feedback to the leadership of Army ERP programs through the full lifecycle of an ERP implementation







Agenda



Opening Remarks
Mr. Chip Raymond

■ ERP Lifecycle Management Mr. Steve Krekeler

Enterprise Solutions Phases
and Key Milestones
Mr. Steve Krekeler

■ Break 20 min

■ Customization vs. Configuration Dr. Ray Sommer

Implementation Phase Key Considerations Mr. Steve Krekeler

■ Enterprise Solutions Toolkits and Resources Mr. Steve Krekeler

■ Q&A



Learning Objectives



- Learn what the unique elements of ERP Lifecycle Management consist of.
 - □ DoD Enterprise Integration Roadmap
 - Phases and Key Considerations
 - Entry and Exit Criteria
 - ☐ Implementation Phase Key Considerations
 - Entry & Exit Criteria
 - Customization vs. Configuration
 - Organizational Structure
 - Importance of Data Quality
 - Testing
- Identify DoD resources for ERP Lifecycle Management



